HYDROGEN GENERATOR UTILIZING CERAMIC TECHNOLOGY

Abstract of the Disclosure

A hydrogen generator including a three-dimensional multilayer ceramic carrier structure defining a fuel reformer. The reformer includes a vaporization zone and a reaction zone including a catalyst. The reformer is operational as either a steam reformer, a partial oxidation reformer or an autothermal reformer. The fuel reformer, or processor, further includes an inlet channel for liquid fuel and an outlet channel for hydrogen enriched gas. The fuel processor is formed utilizing multi-layer ceramic technology in which thin ceramic layers are assembled then sintered to provide miniature dimensions in which the encapsulated catalyst converts or reforms inlet fuel into a hydrogen enriched gas.